

**IN THE CLAIMS:**

*Please amend the claims as follows:*

Claims 1 – 6 (canceled).

7. (Previously presented) A method for fabricating a bipolar transistor, comprising the steps of:

- a) epitaxially growing on a first semiconductor layer of a first conductive type surrounded by isolation layers, a second semiconductor layer having a different band gap from that of the first semiconductor layer and containing an impurity of a second conductivity type so as to extend between the isolation layers;
- b) epitaxially growing on the second semiconductor layer, a third semiconductor layer having a different band gap from that of the second semiconductor layer;
- c) forming on the third semiconductor layer, an insulating film having an emitter opening portion;
- d) forming on the third semiconductor layer and the insulating film, a polysilicon layer containing an impurity of the first conductivity;
- e) patterning the polycrystalline layer and the insulating film [[layer]] to form an emitter electrode; and
- f) implanting ions of an impurity of the second conductive type into the second and third semiconductor layers from a direction tilted from a perpendicular direction with

respect to a surface of a substrate using the emitter electrode and the insulating film as masks,

wherein in the step c), the insulating film is in contact with the upper surface of the third semiconductor layer.

8. (Previously presented) The method of claim 7, further comprising the step of g) drive-in-diffusing an impurity of the first conductive type from the emitter electrode into the third semiconductor layer to form an emitter layer in a region of the third semiconductor layer located under the emitter opening portion,

wherein in the step f), ion implantation of an impurity of the second conductive type is performed four times, with the substrate rotating by 90 degrees at a time

9. (Original) The method of claim 7, further comprising: after the step f), the step h) of forming an insulator sidewall on side surfaces of the emitter electrode and the insulating film; and

the step i) of siliciding upper portions of the third semiconductor layer and the emitter electrode using the insulator sidewall as a mask.

10. (Previously presented) The method of claim 14, wherein in the step d), the second polycrystalline semiconductor layer has a thickness of not less than 300 nm and not more than 500 nm.

11. (Original) The method of claim 7,

wherein the first semiconductor layer has a Si single composition, and

wherein in the step a), the second semiconductor layer having a SiGe or SiGeC mixed crystal composition is grown.

12. (Currently amended) The method of claim 7, wherein in the steps a) and b), a film thickness of the second and third semiconductor layers, which are polycrystalline and serve as an external base layer over the isolation layers, is made thinner than a thickness of the second and third semiconductor layers, which are single crystalline polycrystalline and serve as an intrinsic base layer over the first semiconductor layer, by using UHV-CVD.

13. (Previously presented) The method of claim 7, wherein in the step f), a thickness of the emitter electrode is such that a concentration of the impurity of the second conductivity type, the impurity being implanted into the emitter electrode, is low under the emitter electrode.

14. (Previously presented) The method of claim 7, wherein the emitter electrode consists of a first polycrystalline semiconductor film and a second polycrystalline semiconductor film, and the polycrystalline layer is the second polycrystalline semiconductor film,

wherein the step c) includes the steps of:

c1) successively depositing on the third semiconductor layer, the insulating film and the first polycrystalline semiconductor film containing an impurity of a first conductivity type in this order;

c2) forming the emitter opening portion by patterning the first polycrystalline semiconductor film; and

c3) removing the insulating film inside the emitter opening portion, and

wherein in the step d), the second polycrystalline semiconductor film containing an impurity of a first conductivity type is formed on the third semiconductor layer and the first polycrystalline semiconductor film.